

# " Confidence in your Measurements Requires Continual Improvement"

Speaker/Author: Henry A. Zumbrun

Company: Morehouse Instrument Company 1742 Sixth Ave, York, PA, 17403 USA

Phone: 717-843-0081 Email: [hzumbrun@mhforce.com](mailto:hzumbrun@mhforce.com)

## Abstract

Work environments are unique and feature great variation when it comes to employee engagement. When this variation is significant, so are the headaches, firefighting, disengagement, rework, and turnover, amongst many other issues that make work settings unbearable at times. The quality of the work suffers, and mistakes are more frequent. As a result, more calibration certificates are issued that are incorrect, potentially containing bad data that can ultimately lead to safety implications for the consumer.

Companies with the least variation tend to have cultures with fewer such distractions and an engaged workforce that views problems as opportunities for improvement. Managers set appropriate goals or outcomes, and they work on culture by hiring the appropriate people for each role. Strategic planning, accountability, and core values are central to their operations. In such an environment, everyone in the company understands the company's vision, mission, and purpose, while managers help drive positive change.

When companies focus their energy on establishing an effective culture, employees become empowered, and the organization, along with everyone in it, continually improves. This paper discusses several topics related to the development of a culture of continuous improvement and how such a practice leads to better confidence in measurements made—ultimately creating a safer world.

## Introduction

Measurements are utilized in many of our daily activities. We often use these measurements in our decision-making processes to accept, reject, buy or sell products and services. For instance, a company might budget Research and Development (R&D) costs based on specifications required or mandated by the customer or by regulations. Medical professions use measurement results to assess the outcomes of diagnostic test results.

Various industries utilize test method results by conducting defined or random sampling methods on individual parts, sub-assemblies, and assemblies based on the calibration report. These calibration reports are generated by internal or external calibration laboratories worldwide. Accreditation offers some reassurance; however, accreditation is only a short-term glimpse of a company and its ability to perform calibrations.

Most laboratories rely on human beings to perform calibrations on designated equipment. As such, many companies are performing accredited calibration that relies on the technician's judgment. Yes, the process might be automated; yet somewhere, a person is

often responsible for inspecting the equipment, hooking it up properly, running the test, and signing off on the results.

People are responsible for checking the equipment and packaging it properly, as well as reviewing contracts and ensuring they can meet what is asked of them by their customers. On the flip side, the company requesting the calibration needs to understand its own requirements to make the appropriate service requests. Human beings—not technology—are the ones working to make these requests.

To foster effective workflow and positive outcomes, employees need to consistently make the right decisions in all facets of their job. When they are not engaged, not in the right role, or lack the appropriate leadership to support them, will the measurements they make have an increased probability of being incorrect? In the metrology community, we discuss decision rules, metrological traceability, accreditation, measurement confidence, quality systems, procedures, and processes, which are all critical components of everyday operations. However, sometimes, we are missing the bigger picture of employee engagement. What happens when our team members do not perform to expectations? What type of support would fuel their level of passion and engagement, and thus, encourage them to hold themselves accountable for mistakes? Do they need mentorship or better training to make the correct decisions?

Many companies know the risk levels and the consequences when measurement uncertainty is not properly accounted for. But how many of those companies can make a direct correlation between excellent metrological practices and an engaged workforce? How could many engineering disasters have been avoided if the workforce had been engaged? How many trillions of dollars have been, and continue to be, wasted because human beings make the wrong decisions? How many lives have been lost?

We need to look to our most significant asset—our people—and focus on their engagement since engaged employees will be the ones that perpetuate a cycle of continuous improvement. To achieve this goal, we need to understand what genuine engagement is and what motivates our team. We need to look at positive outcomes when setting goals, creating a culture of best practices, and ensuring that our managers are strong agents of change. Additionally, we need to develop the correct procedures and ensure that our team members align with our company's core values.

### **What Does Employee Engagement Look Like?**

*"People change their behavior and thinking not because they are 'told to be different' but when the conditions are present that require and empower them to figure out what to do and to act on a plan."*

- Henry Cloud, author of *Boundaries for Leaders: Results, Relationships, and Being Ridiculously in Charge*

Employee engagement is an emotional state in which employees feel committed to their work. It translates into people caring for one another and delivering a high level of performance to the organization. Being engaged also means being involved in, and having enthusiasm for, the work. Engaged employees will look for opportunities to improve the overall organization's performance. In general, they are more optimistic than unengaged employees, and they tend to exceed the requirements of their job description.

When these employees are in the metrology community, they continually refine their skills, keep up to date on the latest standards, become members of committees, and research new developments in their field. An engaged employee does not accept procedural workarounds; instead, they strive to correct problematic issues. They certainly do not accept the maxim of "if it's not broken, don't fix it." Essentially, engaged employees are highly motivated.

### **What Motivates Employees?**

*"When people are financially invested, they want a return.  
When people are emotionally invested, they want to contribute."*

- Simon Sinek, author, and inspirational speaker

Literature dating back well over a century proves that money is not the primary motivating factor of productivity if people's physiological and safety needs are already being met. An article from *Harvard Business Review* by Tomas Chamorro-Premuzic titled "Does Money Really Affect Motivation? A Review of the Research" discusses this concept by compiling 120 years' worth of data from 92 quantitative studies, including 15,000 or more individuals and 115 correlation coefficients. The conclusion was that the link between salary and job satisfaction was weak. There was less than a 2 % overlap between pay and job satisfaction levels. However, when difficulties arise, many of us tend to instinctively throw money at the problem. In the same article, the author states, "for every standard deviation increase in reward, intrinsic motivation for interesting tasks decreases by about 25%. When rewards are tangible and foreseeable (if subjects know in advance how much extra money they will receive), intrinsic motivation decreases by 36%." (Chamorro-Premuzic, 2013) Indeed, these are significant findings.

So then, what motivates our team members? If the pay rate is such that one can provide for themselves and others in their household while feeling safe, what else is needed? The answers to these questions are far from simple since all people and organizations are unique. What motivates one person may not be the same for another, and managers might not know unless they ask. How many companies ask team members what their goals are and where they want to be in the next five years?

How many companies feature improvement plans based on team members' ambitions? These ambitions could be anything from "I want to be the best technician," to "I want to run

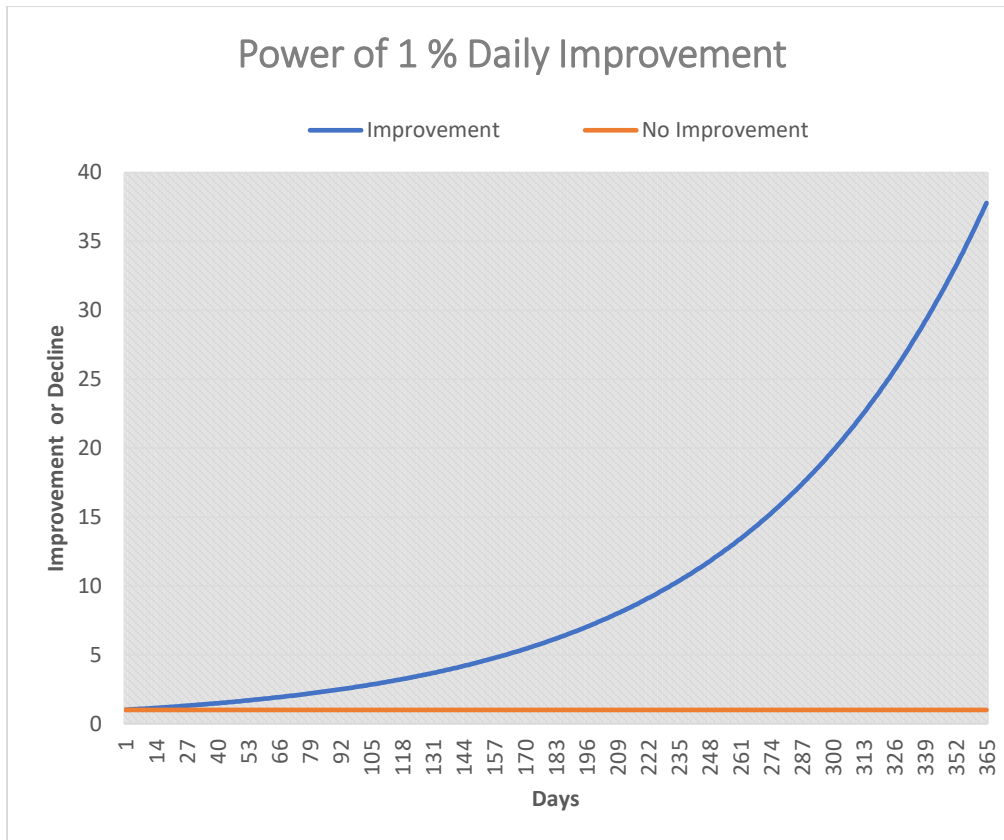
this department," to "I want to hold the highest position in the company." Some, on the other hand, may say that they are perfectly happy in their position. The latter is acceptable, and if it is the case, then the discussion could center around the employees' ideas. If the right questions are not asked, and if companies are not willing to make investments in their team, what are the risks? What happens when another company comes along with a better opportunity that gives the team member a chance to share their ideas or achieve a higher-ranking position? A company with values that both align with and challenge its individual employees has a culture of continuous improvement.

### Continuous Improvement

*"True long-term thinking is goal-less thinking. It's not about any single accomplishment. It is about the cycle of endless refinement and continuous improvement. Ultimately, it is your commitment to the process that will determine your progress."*

– James Clear, author of *Atomic Habits: An Easy and Proven Way to Build Good Habits and Break Bad Ones*

Many of us, as calibration companies, need to look beyond processes, equipment, and accreditation, and begin focusing on employee engagement and a cycle of continuous improvement.



What if our people could improve at a rate of 1 % per day? In approximately 70 days, they would be twice as effective at their job, and in 365 days, they would be 37.78343 times better. In reality, 1 % better is not going to amount to much. One can decide to skip the burger and eat a salad on day 1, but will that minor, fleeting change catapult a person into peak physical shape? No. However, if someone continually chooses to eat a salad, take a walk, lift weights, and slowly shift their habits towards those who are in peak physical shape, what happens? They may become one of those people.

Think about these numbers in another way: If one were running a calibration laboratory with small incremental goals to become 1 % better per week, the lab would be twice as good in seventy-two weeks. Over time, these small habits could translate into being better at responding to customers, thus creating a more positive overall consumer experience. Or they could equate to studying a reservoir of technical content on calibration disciplines, thereby enhancing team members' understanding of, and capabilities within, each discipline.

Imagine an employee who tries to be slightly more effective each day by learning more about their job and about ways to improve their performance? If the employee focused on becoming 1 % better for what may amount to 225 working days, they would improve  $1.01^{225}$  or 9.382295 times compared to their effectiveness when they started. Any conscientious manager would dream of having that kind of progress in their company.

How about as a business—can one alter their habits just enough so that meaningful changes start to materialize? One can invest in people and in the equipment necessary for them to do their job well. Additional training can be encouraged, and in some locations, there are even programs to help reimburse for training. Can companies abandon traditional concepts of cryptic goals and focus on improving the culture?

James Clear makes a poignant statement on the topic of goals: "You do not rise to the level of your goals. You fall to the level of your systems." Simon Sinek adds to this idea by saying, "The goal is not to be perfect by the end. The goal is to be better today."

## Goal Setting

*"If you can clearly articulate the dream or goal, start."*

– Simon Sinek

Our companies set substantial goals; we set lofty goals and goals we want to achieve, yet we rarely achieve them. Why? Likely, larger-scale goals often result in burnout, frustration, and failure.

Simon Sinek has written many books on the topic of business. In *The Infinite Game*, he discusses advancing a just cause. To advance a just cause in our personal lives, we need a sense of purpose or meaning; businesses are no different. Setting goals should not be that difficult. The goals can be aggressive, though they need to be achievable. A company that

sets a goal of 80, when the last year they hit a number closer to 20, might be reaching. Maybe 80 is realistic, though in most cases, setting unrealistic goals can do more to demotivate us since most of us thrive on achievement. So how do we gauge appropriate goals?

There is an anagram for goal-setting that uses the word SMART. SMART goals are Specific, Measurable, Attainable, Realistic, and Time-Bound.

In one of several management classes, I took on goal setting, a discussion about establishing ambitious and ambiguous goals led to the idea of breaking down larger goals into smaller-scale tasks or outcomes that people regard as achievable. When larger goals are broken down with incremental progress points, there is a higher probability that the tasks actually get completed, and thus the larger goal is met. For instance, a salesperson might have an annual goal of x in sales. Let us say the number is \$1,440,000.00. If we wanted to break it down further, that would be \$120,000.00 a month, \$27,692.31 a week, or \$5,538.46 a day (assuming a 5-day workweek).



With this numerical formula in mind, how does the salesperson achieve the greater goal? They start to figure out the behavior, attitude, and technique required to close over \$ 5,538.46 a day. Behavior involves doing the right things at the right times with the right frequency. Attitude is approaching a task with the right (winning) mindset. Technique is comprised of careful tactics with the proper attitude applied.

Perhaps the salesperson determines daily performance indicators that equate to making 20 calls, 10 emails, and 10 follow-ups per day to achieve the daily portion of the greater goal. They track their progress and modify their behavior as needed. If the goal is realistic, they adjust their success triangle accordingly. In our example, the salesperson might make 10

calls and 10 emails in the morning each day. They might do another 10 calls and 10 follow-ups in the afternoon.

The results from these activities and their impact can be measured. The measurement is the outcome of the daily activities. When management creates an environment conducive to individual growth, the team member may seek not only to perform the activities to make \$ 5,538.46 a day, but they might also aim to enhance their technique to increase the close frequency of these activities. It becomes a game of maximizing one's potential and challenging team members on the right way to become better. Though some team members can thrive on their own, management often acts as the beacon to further develop each employee's potential.

## Management

*"When personal agendas become more important than the team  
and the overarching mission's success,  
performance suffers, and failure ensues."*

-Jocko Willink, author and retired US Navy SEAL

Too often, management is focused on the "wrong" metrics. These might include several calibrations performed, efficiencies, bottom-line with neglect towards the human side of the solution, and a blindness to the actual cost incurred that comes with a negative reputation. That's not to suggest that efficiencies and the bottom line are insignificant; businesses *must* focus on the "end state" and the desired outcome. However, they also need to focus on the quality of the work being performed by team members throughout any given process, as well as on the customer's requests.

The data on both concepts is clear. For decades, most employees (70 %) have left a position because of management, or lack thereof. Ineffective managers can frustrate individuals, and they can cause negative consequences to the entire company without realizing it.

Jocko Willink, along with co-author Leif Babin, wrote *Extreme Ownership: How US Navy SEALs Lead and Win*. The book contains leadership advice learned from high-stakes combat scenarios. Some key takeaways are that leaders are accountable and take responsibility for failures. They do not blame their subordinates. Managers are not infallible; like everyone, they make mistakes. The best leaders know this, and effective managers will become better by turning mistakes into learning opportunities. Far too many times, one is punished by a leader for an error rather than encouraged to learn from it.

We've made our own share of errors. Recently, we had two different team members make major mistakes. One dropped a customer's indicator, while another person damaged a piece of equipment. When asked about it, the team member who dropped the customer's indicator shrugged their shoulders, said it wasn't a big deal, and simply apologized. On the other hand, the team member who damaged the piece of equipment was visibly upset; they took ownership of their mistake and immediately began the process of learning from the

setback so it wouldn't happen again. Only one of these people is still on our team today, and they have yet to repeat the same mistake.

Furthermore, great leaders tend to remain calm as they establish priorities and act accordingly. In emergency situations, they study each set of priorities and handle them one at a time. They take time to slow down during a fast-paced event in order to conduct a thorough analysis of the situation and decide on the best first step.

Great leaders also manage risks before they arise. In their book, Willink and Babin share an example of when an intelligence officer reveals that a hostage who they were attempting to save was surrounded by guards with machine guns and explosives right before the rescue mission. Babin was not fazed because his training included various risks that might crop up, and these two scenarios had already been part of the preparation. This example is proof that effective leaders take large projects and break them down into achievable chunks, oftentimes accounting for the spectrum of risks involved. Contrary to popular belief, they do not always have to lead by example, though they must show understanding and set the appropriate expectations.

ISO/IEC 1025:2017 deals a lot with risk. It would be interesting to know the correlation between on-time delivery percentages for companies in which leaders understand risks and properly manage them, versus the same data for companies whose leaders are habitually reactionary. What happens to those that are ill-prepared?

The BP Oil Refinery Explosion is a profound example of poor management, workarounds, and a company unprepared for potential risks. When the distillation tower and attached blowdown drum overfilled, an idling truck ignited 7600 gallons of flammable gas. The high-level alarm malfunctioned because the level transmitter was improperly calibrated; meanwhile, a transmitter with a decades-old datasheet indicated the liquid was falling when it was, in fact, rising rapidly. The root causes of this catastrophe were cost-cutting, production pressures, failure to invest, lack of preventative maintenance, and procedural workarounds for the deteriorating equipment. (2005-04-I-TX, 2007) A cultural problem that stemmed from higher management trickled all the way down to the team members and their performance.

## **Organization Culture**

*"Given the right environment,  
there are few limits to what people can achieve."*

*-Michael Abrashoff, author of *It's Your Ship:  
Management Techniques from the Best Damn Ship in the Navy**

Mike Abrashoff is the former Navy captain whose leadership principles transformed one of the worst ships, USS Benfold, in the Pacific Fleet. After about 12 months of work, the ship became one of the best ships in the Navy, and in less than three years, USS Benfold was deemed the highest-performing ship with an incredibly high retention rate. One of the most



important takeaways from Abrashoff's book *It's Your Ship* is the belief that leadership is about understanding oneself first and then using that knowledge to shape the organization. Once that knowledge is used to shape the organization, leadership traits take effect. Leaders must put the performance of the organization above their egos. Thus, leaders empower their employees to take ownership and challenge the organization to improve.

Quite often, employees get too comfortable with the standards that are set for them. Even those who challenge the organization but realize that the organization is ignoring their feedback and input may eventually accept the status quo. They might continue to show up for work, clocking in and clocking out each day to rinse and repeat. Others will have higher expectations; however, when these expectations are not met, employees are likely to seek another job elsewhere. Eventually, these unaddressed concerns will become fires that add to the chaos—or worse, such negligence will cause loss-of-life events. Such was the case with the BP refinery that blew up.

One of my favorite quotes regarding company culture comes from Henry Petroski's book *To Engineer is Human*, in which the author states, "Failures appear to be inevitable in the wake of prolonged success, which encourages lower margins of safety. Engineers and the companies who employ them tend to get complacent when things are good; they worry less and may not take the right preventative actions." Petroski's claim about complacency might merely describe human nature, or it might point to the old but well-known motto, "If it isn't broke, don't fix it." How much does this mentality stunt organizational growth? What message does it send to others in our organization?

Ultimately, building a strong culture is imperative to establishing the foundation of a strong organization. When the foundation is solid, it can handle more load. Morehouse Instrument Company can help measure that load with our force calibration products. Our technicians who perform these calibrations are engaged and are in the right seats within our organizational structure.

### **Having the right People in the Right Seats**

*"If we get the right people on the bus, the right people in the right seats, and the wrong people off the bus, then we'll figure out how to take it someplace great."*

– Jim Collins, author of *Good to Great:  
Why Some Companies Make the Leap and Others Don't*

Dr. Henry Cloud has written several compelling books, including one called *Necessary Endings*. When I decided to heed the messages in *Necessary Endings* with those from other authors mentioned in this paper, along with Jim Collins's advice about making sure you have the right people in the right seats, I ended up rebuilding our company. That meant firing some critical key team members in our organization. What followed was a very long year of seeking and hiring new employees and encouraging those new team members to

coalesce and tackle the challenges that remained. This was no easy feat, and we did it while working on the most significant contract our company had ever been awarded.

Why would anyone attempt such a drastic organizational overhaul and put so much at stake? For me, the reason was clear; for too long, I had been living in a world that I hated. I had been reading a lot, working overtime, and attending meetings with other people who were happier than I was. I noticed two commonalities among the happy crowd: They seemed to have harmonious team members, and they generally enjoyed work a heck of a lot more than I did.

In *Necessary Endings*, the theory is simple. You have limited time and energy. People need to be evaluated based on the number of resources they consume from you. When they are busy making your life a mess, you do not have the amount of time needed to devote to more fulfilling relationships and projects in your life. When people ignore the pain caused by others for too long, they start to tolerate it. When this happens, they do not see that the job, situation, or relationship isn't working for them. It has likely happened to us all at one point; maybe it was not wanting to end something in order to spare someone's feelings, or maybe it was waiting too long to see if the situation would turn around.

I have repeatedly learned that when you know things need to be ended and you wait longer than is reasonable, you become the one to blame. It is no longer the person's fault; it is yours for tolerating them. You are effectively stealing *their* time until you find something else or someone better. Dr. Henry Cloud has a great quote on this; he states, "We change our behavior when the pain of staying the same becomes greater than the pain of changing. Consequences give us the pain that motivates us to change." I knew two key people needed to leave for a year and a half before the pain pushed me to the brink. Another year and a half later, I am thrilled to be sharing these lessons learned. (If I could hop in a DeLorean, I would go back in time and eliminate those team members a lot sooner.)

When people are causing pain to others in an organization, and the appropriate boundaries are not established, areas with poor performance crop up. Team members lack focus, negativity runs rampant, results falter, work is scattered, and control is difficult to regain.

This is indeed a lesson on culture. I once heard someone compare the "wrong people" to a rowing team. When you have everyone rowing in unison, you go farther, faster. When part of the team refuses to row, the team slows down. And in my case, when some key employees decide to stick their oars straight down into the water to create more friction, chaos ensued. Having defined core values and procedures is a strong starting point for realignment.

## **Core Values and Procedures**

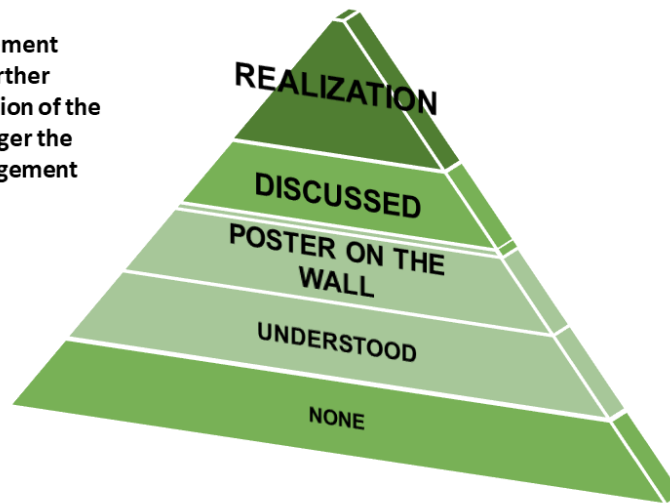
*"When we assign blame, we are pointing the finger to who or what is responsible for a fault or for a wrongdoing.*

*We are trying to make others accountable.  
Blaming does not solve a problem; it usually only makes people defensive."*

– Catherine Pulsifer, Inspirational author

## Core Values Pyramid

Much like Measurement  
Uncertainty, the further  
away from Realization of the  
core values, the larger the  
employee disengagement  
becomes



Core values are fundamental beliefs held by a person or an organization. These guiding principles dictate behavior among the group and help people understand the difference between right and wrong. Engagement is easier to achieve when the core values are realized versus when values look good on the wall or are merely understood to exist. “Realization” is when the organization is firing on all cylinders. Everyone in the organization understands the core values and knows how to apply them. They are discussed frequently, and the values are found in strategy and tactics.

At the “discussed” level, leadership and management have only adopted some of the values. Some may feel the organization references the values if or when it is convenient to do so. When the values are a “poster on the wall,” they are visible, though never discussed. Typically, the organization leader created them without discussion from the team. When they are “understood,” they are not written down and are instead floating around in the leaders' or CEO’s head to be applied inconsistently. “None” means just what it implies; no one has even thought about what the organization might stand for. Core values are valuable management tools; therefore, it makes sense that when core values are neither discussed nor applied, management suffers.

Leadership needs to talk about organizational values, and the discussion and application of these values needs to be carried down through mid-management. The managers are the ones that must carry the water for the organization regarding core values, so if you have the right people in the right seats, they'll grasp this ideal as soon as possible since it will make their jobs easier.

A primary benefit of core values is that they help remove excess emotion from the management equation. Emotion is always present since we are all human, though holding someone accountable to a value is much different from attacking their character. It is much more professional to ask how an employee's behavior aligns with your value of accountability for actions when they do not own up to a mistake, rather than attacking them personally by questioning their integrity.

A strong set of core values includes clarifying statements that management might discuss differently externally versus internally. For instance, if you have a value such as a "Promote a Positive Customer Experience," the value should define what this means both internally and externally to the organization. Internally is what we hold ourselves accountable for as a team, to each other. The internal value might be that we provide quality services and products on time, meeting or exceeding customer expectations.

The external value might be differentiated by how others outside the organization regard us. Let's consider what a "Promote a Positive Customer Experience" means to those who do business with us. We might say, "We differentiate Morehouse from our competition by setting and fulfilling real expectations, proactively communicating, and delivering solutions that meet or exceed customer expectations."

Suppose one of our team members forgets to complete a calibration, review paperwork, or any other important task that causes a shipment deadline to be missed. In this case, the discussion can be free from emotion if management asks for clarification on why we missed the shipment. There might be an entirely valid reason that all can agree on. However, if the reason is not valid, simply asking a team member how their actions contributed to a positive customer experience is usually enough to open a conversation about how their lack of performance is impacting the organization. Such a discussion may help them realize that they are accountable for their behavior, and that their behavior can make a difference.

Permeating these values throughout an organization takes time: Likely 2-4 months for them to be widely known, 4-6 months for understanding (if they are consistently being applied), and 6-12 months for them to be driven through the organization in a meaningful way. The first step is to gather and consult the entire team so everyone can decide upon and define the values.

To begin this process, we sat down with our managers and members of our leadership team over several weeks to define our core values and their internal and external meanings. The team came up with five values that define Morehouse as an organization: Promote a Positive Customer Experience, Raise the Standard, Own Your Actions, Speak

Your Truth with an Open Mind, and Trust the Team. Yes, they spell PROST, as we like to have some fun. The values themselves are only solidified with what they mean to our team internally and externally to best serve our customers.

For example, our internal value for Speak Your Own Truth with Integrity is to speak one's truth while knowing bias exists and keeping an open mind.

On Own Your Actions, our external value is that we hold vendors and customers responsible for their actions while maintaining and clearly communicating our high-quality standards. If a customer or potential customer is shopping on price alone, we are not interested in back-and-forth negotiation games, and we will communicate this to them. We believe we provide a higher level of value to our customers and are not interested in those customers who prioritize price above the overall quality of service.

Consider this analogy: I drive to and from work each day, and I do not need the full-sized vehicle I currently own; I could instead buy an economical moped or scooter. However, the latter are not desirable forms of transportation during cold-weather months or on rainy days. It is just as unrealistic for me to only consider the cost of my transportation as it is for price to be the primary consideration in our business. Yes, price is important. But we decided to stop filling out forms a long time ago when a potential customer says the lowest bid gets the work.

Our measurements matter, and we do not see lowering our standards to provide lower pricing as beneficial. It would require less accurate measurements or less time spent making sure these measurements are correct. We believe in setting the highest standards for the quality of work we perform, and our team is accountable to those high standards.

### **Creating a Culture of Accountability**

*"Accountability breeds response-ability."*

— Stephen R. Covey, author of  
*The 7 Habits of Highly Effective People*

Most people want to be challenged while striving to be better. Stephen Covey has authored many books but is likely most known for his bestselling book, *The 7 Habits of Highly Effective People*. Covey writes that effective people are proactive, they begin with the end in mind, they put first things first, they think win-win, they seek first to understand, and then to be understood. Furthermore, highly effective people synergize, taking time off to sharpen the saw or work on themselves. Though most known for detailing these seven habits, Covey also writes about the ground rules of accountability. Four of these rules are:

1. Ensure only one employee is responsible and accountable for making things happen.

2. Make sure only one employee is responsible and accountable for each key assignment.
3. If the accountable person fails to get things done, give them something else to do, and replace them with someone else who is more capable.
4. Never allow committees or groups of people to be accountable for making things happen (or not happen).

While these are important ground rules, there is much more to accountability. People need to be held accountable to something significant. Accountability should not be a synonym for discipline, nor a stick for micromanagement. Instead, team members should be given the autonomy to be held accountable. One way to enable autonomy is to establish and execute core values.

Core values help drive organizational culture. However, many organizations rely on procedures and manuals for accountability. They have employees sign off that they have read the literature, and the mindset of management is that “if we have a procedure, we expect everyone to follow it.” However, many organizations fall into a system of reviewing their manuals far too infrequently, and many are not regularly revising their procedures for improvement. One of the best ways to improve procedures is by welcoming input from those who are actually following the procedures.

We discussed management earlier, and it’s important to reiterate the fact that effective managers are those who are inspiring more positive team member behavior. The book *The One Minute Manager* by Kenneth Blanchard and Spencer Johnson advises praising an employee's actions when they do something right and counseling them as soon as they do something wrong. When offering praise, catch someone doing something right, look them straight in the eye, and tell them precisely what they did right. Do not wait until the next review to give praise. Get into a habit of giving praise when praise is due.

One can apply a similar tactic when an employee makes a mistake. The manager has access to the core values, procedures, and manuals to give the employee quick counsel to limit the emotion from the equation. The manager looks the person straight in the eye and discusses the behavior in question with them. The key is that the manager is critiquing the behavior and not attacking the person. They can say how disappointed they are. The thought process is that the person does not forget either the praise or counsel; therefore, they are more likely to repeat actions that garner praise and avoid the mistakes that warranted counseling.

When the team members understand the expectations from management, accountability often occurs, and it can be contagious since many team members thrive on praise. Yet, there are some additional ingredients of engagement, such as aligning around a vision, a mission, and a purpose.

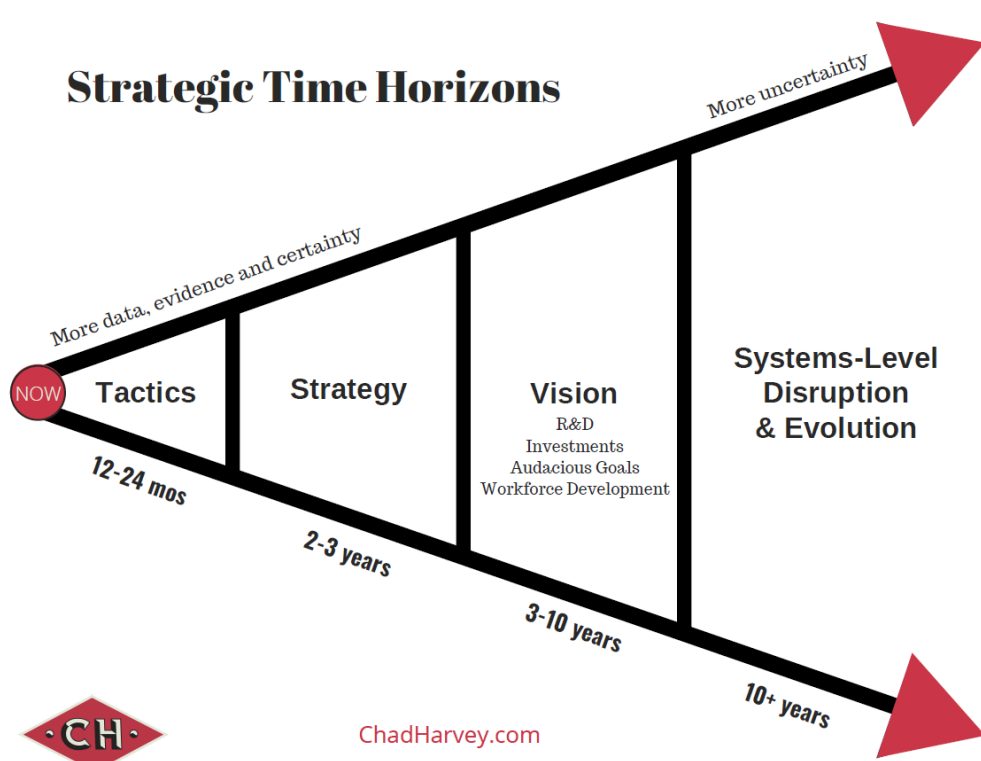
### **Vision, Mission, & Purpose**

*Yesterday I was talking with a friend of mine about a major product mishap that's going to cost a company in his industry tens of millions of dollars. The error was likely avoidable, and his statement to me was, "If you rely on people, \$\*@! can happen."*

– Chad Harvey

Chad Harvey is a business coach who publishes a daily email newsletter. (Harvey, 2021) I have known Chad since grade school and consider him a good friend. He has been a trusted advisor, so it seems fitting that I conclude this paper with a section inspired by the two years I have worked with Chad.

Chad tells me the person addressing a mishap is likely correct, and that somewhere down the line, someone either disregarded or downright ignored a critical step in that company's process. Yet that's precisely the issue with any process—its successful execution still depends greatly upon people, and we MUST continue to rely upon them. That's not the big takeaway here, though. Instead, consider that as we move into an increasingly automated future, the decisions that an organization relies upon its leaders to make will likely carry increased and compounded weight within that organization. So how confident can an organization be in its manager's ability to make the right call?



Part of that ability will be to make sure the stakeholders know the organizational strategy and buy into the organization's Vision, Mission, and Purpose.

A vision statement generally addresses where a company intends to be within the next three to ten years. It is essential to understand the timeframe associated with drafting a vision statement. Three to ten years is a long time, and the marketplace will continue to evolve in unexpected ways; therefore, an outstanding vision statement is going to provide both inspiration and direction without crumbling under the weight of detail.

- Our Vision is *To have Morehouse products in every reference laboratory making force or torque measurements*

A mission, or mission statement, combines aspiration, inspiration, and competency. It can be thought of as what the company intends to become in the future. As such, it is a path that every manager and employee must walk in order to realize what the organization can achieve.

- Our mission is *To provide our customers with the best calibration equipment and service solutions that address realistic, achievable expectations and best metrological practices.*

A purpose is why anyone in the organization shows up for work each day. It is an inspirational "why." A strong purpose statement can rally team members to the organization's just cause.

- At Morehouse, our purpose is *We create a safer world by helping companies improve their force and torque measurements.*

Chad cautions that while these concepts appear simple on the surface, they are quite difficult to implement. He states:

“The movement toward purpose statements and a heightened awareness of core values is a positive step forward. However, all too often, the necessary detective work involved to uncover (and codify) an organization's core values is rushed and compressed. In short, core values are often sacrificed upon the high altar of Strategic Planning and Purpose Statements for three primary reasons:

1. **Difficulty** – The work required to surface core values is challenging.
2. **Time** – The time required to surface core values properly is more than many organizations are willing to spend.
3. **ROI** – Many leaders do not understand the long-term value and return on investment that properly developed core values provide.”

It is imperative for organizations to understand that although establishing and implementing core values is an arduous process, ultimately, it is a process that will benefit everyone—managers, employees, and customers—in the end.

Engagement. Motivation. Continuous Improvement. Goal Setting. Management. Culture. The Right People. Strategic Planning. Core Values. Procedures. Accountability. Vision. Mission.



Purpose. These are a few of the main ingredients in the human stew that your organization is cooking. How's that recipe coming along?

## **Summary**

The sections above mention various books, articles, references, and training materials that anyone can research more thoroughly if compelled to do so. These resources explore what is needed for an organization to continually improve, survive difficult situations, and thrive when others fail.

Ineffective managers may be consciously or unconsciously making decisions based on myths. Two examples of these myths include the story of the cubit and the story of the frog. The cubit was the Egyptians' standard of measurement used to build the pyramids. At an NCSLI conference, an attendee started a rumor about the cubit and calibration. The rumor was that calibration of the cubit would happen every full moon, and those that failed to have their cubit calibrated would face a punishment of death. This story was later found to be untrue.

The story of the frog has been told over and over throughout history. The myth is that if you throw a frog into a pot of boiling water, the frog will jump out; however, if you set the frog in warm water and slowly raise the temperature, the frog will not realize it is being cooked alive. The truth is that a frog might jump out of a pot of boiling water, or it might die; either outcome is possible. In the latter scenario, the frog will jump out of a pot when the water gets too hot and will not be cooked alive.

With all that said, many people working in managerial roles have a skewed perspective of the reality of their organization. They come into work every day with bias and fail to make the necessary changes to establish a culture of continuous improvement. These managers would benefit from acknowledging and challenging their own biases and using this paper as a starting point to initiate discussions around values. Now is the time to calibrate and to also adjust since calibration does not include adjustments per the VIM definition that coincides with our idea of a continuous improvement culture.

We need to set values that reinforce a positive, inclusive, dynamic culture as core values are imperative and foundational for any successful organization engaged in continuous improvement.